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ABSTRACT OF THE DISCLOSURE

A method of embedding data in material comprises the steps of:

embedding data in original material to produce data embedded material;

removing the watermark from the data embedded material to produce

5   recovered material;

comparing the original and recovered material to determine the differences and locations of differences therebetween; and

storing the said locations and corrections which correct the said differences.

A method of removing the data embedded in the material, comprises the steps

10   of:

removing the data from the material to produce recovered material;

deriving the said corrections and locations from the said store; and

using the corrections to correct the recovered material at the said locations.

A method of embedding data in material, preferably comprises the steps of:

15   producing transform coefficients C_i representing a spatial frequency transform of the material, and

combining the coefficients C_i with the data bits R_i to produce a modified coefficient C_i' where

$$C_i' = C_i + \alpha_i R_i$$

20   the method further comprising determining α_i for each unmodified coefficient C_i as a function $F\{C_n\}_i$ of a predetermined set $\{C_n\}_i$ of transform coefficients C_n which set excludes the coefficient C_i.

[Figures 3A, B and 4]